IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF TEXAS
MARSHALL DIVISION

SPECIALIZED MONITORING SOLUTIONS, LLC,	§ § §	
Plaintiff,	§ § §	Civil Action No. 2:17-cv-768-WCB
v.	§ §	
ADT LLC d/b/a ADT SECURITY SERVICES,	§ § §	
Defendant.	§ §	

MEMORANDUM OPINION AND ORDER

Before the Court is a motion for summary judgment by defendant ADT LLC d/b/a ADT Security Services ("ADT"). Dkt. No. 62. Plaintiff Specialized Monitoring Solutions, LLC, ("SMS") is the owner of U.S. Patent No. 6,657,553 ("the '553 patent") and has asserted claims 1–5, 7–9, 17–23, 25–27, and 35–36 of that patent against ADT. ADT seeks summary judgment of invalidity as to all of the claims asserted against it, arguing that the asserted claims of the '553 patent are invalid under 35 U.S.C. § 101 for failure to recite patentable subject matter. The motion is GRANTED.

BACKGROUND

On December 12, 2017, SMS brought this patent infringement action against ADT. The case was initially consolidated with similar actions against two other defendants. Those cases have been settled and dismissed.

1. The Asserted Claims

The '553 patent is entitled "Method of Monitoring a Protected Space." Independent claim 1 of that patent is a method claim. Independent claim 19 is an apparatus claim that generally corresponds to claim 1 but is largely drafted in means-plus-function format. Independent claim 35 is an apparatus claim that generally corresponds to claim 1 and is not drafted in means-plus-function format.

Claim 1 provides as follows:

> 1. A method of collecting and disseminating information regarding a plurality of protected spaces comprising the steps of:
> providing a database with a plurality of secure storage areas where each secure storage area of the plurality of secure storage areas is reserved for a respective protected space of the plurality of protected spaces;
> reserving a subarea of each secure storage area of the database for each type of data received from the protected spaces;
> detecting a signal event of a protected space of the plurality of protected spaces, where such signal event is not from a security sensor and is not a video signal;
> coding the signal event into a packet message;
> transferring the coded packet message to the database through an internet connection between the protected space and the database;
> determining a type of signal event of the packet message[;]
> storing the coded message packet in a secure storage area and subarea of the plurality of secure storage areas of the database that corresponds to the protected space and type of signal event of the protected space under a password assigned to a manager of the protected space; and
> providing access to information of the coded message packet through an Internet connection between the manager and the database based upon the password assigned to the manager.

Claim 19 provides as follows:

> 19. An apparatus for collecting and disseminating information regarding a plurality of protected spaces comprising:
> a database with a plurality of secure storage areas and subareas where each secure storage area of the plurality of secure storage areas is reserved for a respective protected space of the plurality of protected spaces and each subarea is reserved for a type of signal event received of [sic] the respective protected space;
> means for detecting a signal event of the protected space;
> means for coding the signal event into a packet message;

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means for transferring the coded packet message to a database through an internet connection between the protected space and the database;

means for determining a type of signal event of the message packet;

means for storing the coded message packet in a secure storage area and subarea of the plurality of secure storage areas and subareas of the database that corresponds to the protected space and type of signal event under a password assigned to a manager of the protected space; and

means for providing access to information of the coded message packet through an Internet connection between the manager and the database based upon the password assigned to the manager.

Claim 35 provides as follows:

35. An apparatus for collecting and disseminating information regarding a plurality of protected spaces comprising:

a database with a plurality of secure storage areas and subareas where each secure storage area of the plurality of secure storage areas is reserved for a respective protected space of the plurality of protected spaces and each subarea is reserved for a type of signal event received of [sic] the respective protected space;

a sensor adapted to detect a signal event of the protected space;

[a] code processor adapted to code the signal event into a packet message;

an Internet connection adapted to transfer the coded packet message to a database through an internet connection between the protected space and the database;

a database adapted to store the coded message packet in a secure storage area and subarea of the plurality of secure storage areas and subareas database [sic] that corresponds to the protected space and type of signal event under a password assigned to a manager of the protected space; and

a web site adapted to provide access to information of the coded message packet through an Internet connection between the manager and the database based upon the password assigned to the manager.

The specification explains that the invention was intended to provide an efficient means for collecting and disseminating information about "protected spaces," i.e., spaces such as computer rooms that need to be constantly monitored for conditions such as heat or humidity. '553 patent, col. 1, ll. 11–19. The invention provides for appropriate sensors to be situated in the protected spaces, for the sensors to detect an event needing to be reported, and for the signals from the sensors to be coded into a packet message to be sent to a remote database via the Internet. The data from the sensors is then stored in a secure area and subarea of the database corresponding to

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the protected space and the type of signal event, under a password assigned to a manager, who can use the password to access the data. *Id.*, col. 1, ll. 55–67.

The amended complaint describes the patent claims in a similar manner, stating that the claimed methods and apparatuses of the '553 patent

> detect signal events occurring at a protected space, code the signal events into a packetized message, and transfer these coded packet messages to a database. The coded packet messages are stored in reserved areas and subareas of the database in accordance with the type of signal event and the respective protected space. Additionally, the coded message packets are accessible via the internet.

Dkt. No. 16, at ¶ 11.

After SMS filed this action, ADT filed a motion to dismiss the complaint for unpatentability under section 101. Dkt. No. 12. Three weeks later, SMS filed an amended complaint, Dkt. No. 16, and ADT filed a motion to dismiss the amended complaint, Dkt. No. 18. The Court heard oral argument on the motion to dismiss on October 11, 2018.

Following the oral argument, the Court determined that the issues raised in the motion to dismiss filed by ATD would be best handled through a motion for summary judgment targeted at the section 101 issue. Dkt. No. 57. Accordingly, the Court set a schedule providing for the parties to make their summary judgment submissions following the exchange of preliminary claim constructions. Proceeding in that manner gave the parties an opportunity to offer evidence and argument as to whether there were any disputed issues of material fact presented by the section 101 issue. The parties subsequently exchanged proposed claim constructions, Dkt. No. 61, and ADT filed its motion for summary judgment on section 101. Dkt. No. 62. SMS filed its response, Dkt. No. 66; ADT filed a reply, Dkt. No. 67; and SMS filed a surreply, Dkt. No. 69.

In their papers, the parties identified the claims that are at issue. In its amended complaint, SMS alleged that it was asserting "at least" claims 1 and 35. In its infringement contentions,

however, SMS asserted 18 more claims. Those newly asserted claims included independent claim

19 as well as 17 claims that depend from one of independent claims 1, 19, or 35. Dkt. No. 50-1.

Although SMS stated that it has reserved its right to amend its infringement contentions, the Court

will address only the 20 claims that SMS is currently asserting. Because the three independent

claims are quite similar for purposes of this motion, the Court will analyze ADT's motion with

respect to those claims together, and will deal separately with the dependent claims in part 3,

below.

2. Claim Construction and Summary Judgment

a. The proposed claim constructions

Prior to oral argument on the motion to dismiss, the Court directed the parties to advise the

Court of any potential claim construction issue that could affect the Court's analysis of the section

101 issue, and any factual showing that the plaintiff might make, or any facts that the plaintiff

might reasonably expect to encounter through discovery, that could affect this issue. During oral

argument of the motion, the Court inquired of the parties at some length regarding these questions.

Following that hearing, and before ADT filed its summary judgment motion, the parties

submitted their proposed claim constructions, offering different constructions for five claim terms:

"secure storage area(s)"; "subarea(s)"; "reserved"; "corresponds to the protected space and type of

signal event"; and "determining a type of signal event of the packet message." Dkt. No. 61. The

parties' proposed constructions were not significantly different from one another. For most of the

terms, ADT proposed that no construction was necessary or proposed an alternative construction.

For the most part, SMS's proposed constructions were natural interpretations of the claim terms.[1]

The parties' proposed constructions were as follows:

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[1] The one exception is SMS's proposed construction of the term "secure storage areas,"

1. "secure storage areas." SMS's proposal: "space(s) physically and/or logically segregated and secured through differentiated password authorization." ADT's proposal: "an area within the database secured by an associated password."

2. "subareas." SMS's proposal: "unique, nonoverlapping area(s) allocated by the system within a secure storage area." ADT's proposal: "No construction necessary. Alternatively: an area within a larger area."

3. "reserved." SMS's proposal: "allocated by the system prior to the transfer of coded packet data (claims 19 & 35: coded packet message)." ADT's proposal: "No construction necessary. Alternatively: to set or have set aside or apart."

4. "corresponds to the protected space and type of signal event." SMS's proposal: "the secure storage area(s) and subarea(s) are determined by the system at least in part based on two dependencies: the pertinent protected space and a signal type." ADT's proposal: "No construction necessary."

5. "determining a type of signal event of the packet message." SMS's proposal: "analyzing the packet to determine one or more of a plurality of signal types associated with the packet message." ADT's proposal: "No construction necessary."

The Court has considered the effect of the competing claim construction proposals on the motion for summary judgment and has concluded that, in light of the similarity of the proposals, the issues presented on summary judgment would not be affected by the Court's adoption of one party's proposal over the other with respect to any of the five terms. Put another way, accepting SMS's proposed claim constructions for each of the five disputed terms would not affect the

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which expands upon the natural meaning of the words by reliance on disclosures in the specification.

Court's analysis of the summary judgment motion. Indeed, neither party has pointed to any reason to believe that the question of patent eligibility would turn on the Court's decision as to any of the claim construction issues. Moreover, SMS has not suggested any reason to believe that discovery would lead to information useful to SMS on the section 101 issue. That is unsurprising, as ADT is unlikely to have information in its sole possession that would be enlightening as to the viability of SMS's patent. Accordingly, the Court believes it is appropriate to decide the section 101 issue now and spare the parties the burden that would be incurred in delaying disposition of the issue until after claim construction and discovery.

b. The summary judgment motion

On the merits of the summary judgment motion, ADT argues that the asserted claims of the '553 patent "are directed to the abstract idea of collecting, organizing, storing, and disseminating sensor data" and as such are directed to patent-ineligible subject matter. Dkt. No. 62, at 7. The steps set out in the independent claims, ADT contends, amount to the following: "data is collected from a sensor, transmitted to [a] remote database, stored in a remote database based on the type of data collected, and disseminated to individuals with permission (a password) to access the data." *Id.* at 8. The process of collecting, organizing, classifying, storing, and presenting information, according to ADT, has many pre-computer analogues and has been characterized by the Federal Circuit in numerous cases as a patent-ineligible abstract idea. *Id.* at 8–9.

ADT further argues that, as the specification of the '553 patent acknowledges, both the protected spaces, such as computer rooms, and the components of the claimed apparatus, such as the sensors, the coding processor, the database, and the dissemination server, are all conventional. In particular, ADT points to the database of the preferred embodiment, which, the specification

states "could be Microsoft SQL Server, Oracle, or mySQL." '553 patent, col. 2, ll. 27-28. Citing two prior art references that are in evidence, ADT notes that SQL is an industry-standard language that was specifically designed to work with relational databases and that by 1999 relational databases were so popular that they had become an industry standard database form. Dkt. No. 62, at 4 (citing Dkt. Nos. 62-3, 62-4). ADT explains that relational databases consist of a number of tables in which data resides, with the rows in the tables representing entries in the table and the columns in the tables each being reserved for a particular "data type" associated with that column. *Id.* at 4–5. According to ADT's evidence, it was well known at that time that access to particular tables could be restricted using password and user authentication techniques and that access to relational databases could be provided over the Internet through the use of a web browser. *Id.* at 5.

Based on that analysis of the '553 patent, ADT concludes that the asserted claims are not patent-eligible because they are "focused on the combination of those abstract-idea processes" of collecting data from sensors, classifying the data based on the type of information, and presenting the data without any "inventive technology for performing those functions." *Id.* at 9–10 (quoting *Elec. Power Grp., LLC v. Alstom S.A.*, 830 F.3d 1350, 1354 (Fed. Cir. 2016)).

SMS responds by pointing to the memory structure of the claimed database to support its contention that the asserted claims are not directed to abstract ideas and that they include inventive concepts. Dkt. No. 66, at 9. In particular, SMS argues that the claims are patent-eligible because the invention reserves an area of the claimed database for each monitored space and reserves a subarea within each area for each type of data involved. *Id.* at 12, 17. Referring to the specification, SMS notes that the invention employs "a coding step or code processor component that codes a detected signal event into a packet with the required information that can be used by

the database to store the information in the appropriate area and subarea of the database." *Id.* at 17 (citing '553 patent, col. 4, ll. 16-41). In addition, SMS argues, the secure database structure "is paired with the password-specific access to areas and subareas of the database that allow internet access to the information in the database." *Id.* at 17–18.

In opposing summary judgment, SMS relies heavily on the prosecution history of the '553 patent. In particular, SMS cites the decision of the patent examiner, who explained that he had allowed the application over a close prior art reference on the ground that the prior art reference did not teach or suggest "storing a coded message packet in a secure storage area and a sub-area or the plurality of secure storage areas of the data base that corresponds to the protected space and type of signal event of the protected space under a password assigned to a manager of the protected space." *Id.* at 10 (citing Dkt. No. 66-5, at 2).

DISCUSSION

The framework for analyzing the issue of patentable subject matter under 35 U.S.C. § 101 is well settled. The Supreme Court's decision in *Alice Corp. Pty. Ltd. v. CLS Bank Int'l*, 573 U.S. 208 (2014), established a two-step test for determining whether a patent is directed to an unpatentable idea. First, the court must determine "whether the claims at issue are directed to one of those patent-ineligible concepts," such as an abstract idea. *Id.* at 217. Second, if the claims are directed to an abstract idea, the court must decide whether there is an "inventive concept" in the claims at issue. The Supreme Court has characterized an "inventive concept" as "an element or combination of elements that is 'sufficient to ensure that the patent in practice amounts to significantly more than a patent upon the [ineligible concept] itself'"; the presence of an "inventive concept," the Court has explained, is enough to "'transform the nature of the claim' into a patent-

eligible application." *Id.* (quoting *Mayo Collaborative Servs. v. Prometheus Labs., Inc.* 566 U.S. 66, 72–73, 78 (2012)).

The first step of the two-step analysis from *Alice* requires the court to examine the "focus" of the claim, i.e., its "character as a whole," in order to determine whether the claim is directed to an abstract idea. *SAP Am., Inc. v. InvestPic, LLC*, 898 F.3d 1161, 1167 (Fed. Cir. 2018); *Internet Patents Corp. v. Active Network, Inc.*, 790 F.3d 1343, 1346 (Fed. Cir. 2015). The second step, if reached, requires the court to "look[] more precisely at what the claim elements add—specifically, whether, in the Supreme Court's terms, they identify an 'inventive concept' in the application of the ineligible matter to which (by assumption at step two) the claim is directed." *Elec. Power Grp., LLC v. Alstom S.A.*, 830 F.3d 1350, 1353 (Fed. Cir. 2016) (citations omitted).

1. Abstract Idea

A number of section 101 cases from the Federal Circuit involve claims that are directed to the collection, organization, analysis, and display of information. The circuit court has repeatedly held that such claims are directed to abstract ideas, as that term is used in the first step of the *Alice* test. Several of those cases warrant close consideration.

The first, *Electric Power Group, LLC v. Alstom S.A.*, *supra*, is a case very similar in several respects to this one. As in this case, the claims at issue in *Electric Power Group* were directed to a monitoring system. In particular, the claims recited the steps of detecting events (such as power losses) on an interconnected power grid; analyzing the events; combining that data with data from other sources; storing and then displaying the results; and deriving a composite indicator of reliability for the grid.

The court began by explaining that the act of collecting information is "within the realm of abstract ideas." 830 F.3d at 1353–54 (citing cases). The court noted that "merely presenting the

results of abstract processes of collecting and analyzing information, without more (such as identifying a particular tool for presentation), is abstract as an ancillary part of such collection and analysis." 830 F.3d at 1354 (citing *Content Extraction & Transmission LLC v. Wells Fargo Bank, Nat'l Ass'n*, 776 F.3d 1343, 1347 (Fed. Cir. 2014), and *Ultramercial, Inc. v. Hulu, LLC*, 772 F.3d 709, 715 (Fed. Cir. 2014)). The claims in the case before it, the court explained, involved "a process of gathering and analyzing information of a specified content, then displaying the results, and not any particular assertedly inventive technology for performing those functions." 830 F.3d at 1354. For that reason, the court held, the claims were directed to an abstract idea. *Id.*

This case likewise entails the process of gathering information (by "detecting a signal event" in the "plurality of protected spaces"), analyzing that information (by "coding the signal event into a packet message" and "determining a type of signal event of the packet message"), storing the information ("in a secure area and subarea of the plurality of secure storage areas of the database"), and displaying the results to a user (by "providing access to information of the coded message packet through an Internet connection between the manager and the database based upon the password assigned to the manager"). As in *Electric Power Group*, those limitations are set forth in functional terms and thus are not tied to any specific and novel type of technology for performing those functions. The '553 patent specification makes clear that the patent contemplates the use of standard methods of collecting and analyzing data; there is nothing in the patent to suggest that it is directed to a novel means for performing the recited functions. In describing the devices used to perform those functions, the specification directs the use of off-the-shelf sensor technology, data collection units (CPUs), software, and hardware. '553 patent, col. 2, ll. 4–19 (referring to the use of "any appropriate processor," "any appropriate sensor technology," "appropriate hardware," and "an appropriate [communications] protocol," each of which is

accompanied by a reference to commercially available components that can be used for those purposes).

As for the limitation that specifies a database containing a plurality of secure storage areas, it is clear that the database is simply the location where the information is stored after being analyzed (i.e., after being separated into the secure storage areas, each of which "is reserved for a respective protected space of the plurality of protected spaces," '553 patent, claims 1, 19, and 35). Information that is organized and stored in a computer is conventionally stored in a database. Using a database to store information in discrete categories is itself an abstract idea. Here, too, the specification does not suggest any specific structure or design for the database that is required to perform the recited functions, but simply states that the database "may rely upon custom software developed using [a commercial product]," and may "collect information from a number of CPUs in a number of protected spaces and store the information in a database, which could be Microsoft SQL server, Oracle, or MySQL." '553 patent, col. 2, ll. 20–27. Thus, as in *Electric Power Group*, the '553 patent does not claim "any particular assertedly inventive technology for performing [the recited functions]," 830 F.3d at 1354, including the functions performed by the database. The database is simply the location where the data is (1) segregated in discrete areas and subareas according to the particular protected area and signal type and (2) secured by making the data accessible only by password.

Moreover, the court in *Electric Power Group* recognized the important distinction between a claim that is focused on the "asserted advances in uses to which existing computer capabilities could be put," as opposed to "a specific improvement—a particular database technique—in how computers could carry out one of their basic functions of storage and retrieval of data." *Id.* As in *Electric Power Group*, the invention in this case is not directed to an improvement in the

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functioning of a computer. Instead, the invention consists of the use of a generic computer in aid of processes that constitute abstract ideas.

To the extent that SMS argues that the database recited in the asserted claims of the '553 patent was an improvement in database structure, the evidence offered by ADT with its summary judgment motion, unrebutted by SMS, establishes the contrary. ADT's evidence regarding relational databases in general, and SQL-based databases in particular, showed that such databases, which were conventional at the time of the patent application, contain tables consisting of separate columns for separate types of data and rows for separate entries within each type. *See* Dkt. No. 62, at 4 (citing Dkt. Nos. 62-3, at 7, 13–15, 23, 40; 62-4, at 24–26, 41, 54–57, 365–67). That architecture is entirely consistent with storing data relating to particular protected spaces in separate areas and data relating to different types of signals in different subareas within those areas, as is indicated by the references to SQL-based relational databases in the specification. *See* '553 patent, col. 2, ll. 23-28.[2]

Another case that is similar to this one is *BSG Tech LLC v. BuySeasons, Inc.,* 899 F.3d 1281 (Fed. Cir. 2018). The patents at issue in that case were directed to a "self-evolving generic index" for organizing information stored in a database. *Id.* at 1283. The patents claimed indexing software that, according to the specifications, organized "information about various items using classifications, parameters, and values," and enabled users to add new parameters for describing

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[2]   SMS argues at one point (Dkt. No. 66, at 12) that "nothing in ADT's SQL references . . . suggests that the tables of the relational databases discussed therein were physically segregated as can be the case with the claimed 'secure storage areas.'" But there is nothing in the claims or the specification that requires the data to be physically separated in the claimed database, and SMS's proposed claim construction merely asserted that the secure storage areas are "physically and/or logically segregated." ADT's evidence regarding the conventional SQL-based databases indicates that the data in those databases is logically segregated by different types of data and different entries for each data type.

items. *Id.* As the court noted, one of the representative claims recited a method of "indexing and retrieving data being posted by a plurality of users to a wide area network," which comprised providing users with a mechanism for posting data as parametized items and with various types of previous usage information that could assist them in choosing parameters and values. *Id.* at 1284. Another representative claim recited a method of indexing an item on a database comprising item classifications, parameters, and values, guiding the user in selecting a specific classification for the item, storing the item in the database, and guiding the user in selecting parameters and values by reference to historical usage information for values used by other users. As such, the court held, the asserted claims were directed to the abstract idea of employing historical usage information in determining how to classify data. *Id.* at 1285.

The Federal Circuit in *BSG* rejected the plaintiff's argument that the claims were not directed to an abstract idea because they required a specific database structure. *Id.* at 1286. The degree of specificity of the claims did not save the claims from being patent-ineligible, the court held, but merely "limited the abstract idea to a particular technological environment." *Id.* The court added that the recitation of "a database structure slightly more detailed than a generic database does not save the asserted claims at step one [of the *Alice* two-step test]." *Id.* at 1287.

The *BSG* court similarly rejected BSG Tech's argument that the benefits of allowing users to quickly and efficiently access large numbers of records, while identifying those that are relevant, did not constitute "a non-abstract improvement in database functionality." *Id.* at 1287. Those benefits, the court held, are not improvements to database functionality, but instead are "benefits that flow from performing an abstract idea in conjunction with a well-known database structure." *Id.* at 1288.

The court in *BSG* distinguished the Federal Circuit's previous decisions in *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327 (Fed. Cir. 2016), and *Visual Memory LLC v. NVIDIA Corp.*, 867 F.3d 1253 (Fed. Cir. 2017), which held that the claims at issue in those cases were not directed to abstract ideas. The court observed that in *Enfish* the Federal Circuit had determined "that claims related to a database structure were not abstract because their focus included a new 'self-referential table [that] functions differently than conventional database structures.'" *BSG Tech LLC*, 899 F.3d at 1288 (alteration in original). The self-referential table, the court explained, "enabled programmers to construct databases in new ways that required less modeling and configuring of various tables prior to launch." *Id.* The court also noted that the Federal Circuit in *Enfish* had "expressly distinguished this kind of improvement in computer functionality from the performance of 'economic or other tasks for which a computer is used in its ordinary capacity.'" *Id.* (quoting *Enfish*, 822 F.3d at 1336).

The *BSG* court explained that in *Visual Memory* the court had similarly "determined that the claims at issue were directed to an 'improved memory system' that configured operational characteristics of a computer's cache memory based on the type of processor connected to the memory system. Depending on the processor type, the invention's memory caches could adjust their function, which allowed the claimed invention to accommodate different types of processors without compromising performance." *BSG Tech LLC*, 899 F.3d at 1288 (citation omitted). Based on that analysis, the *BSG* court concluded that *Visual Memory*, like *Enfish*, "concerned claims that focused on improved ways in which systems store and access data." *Id.* In the case before it, by contrast, the *BSG* court found that "the focus of BSG Tech's claims is unrelated to how databases function." *Id.* The court spelled out that distinction as follows:

> Under the claimed methods [in the *BSG* case], information inputted by users into a
> database is stored and organized in the same manner as information inputted into

conventional databases capable of indexing data as classifications, parameters, and values. The claims do not recite any improvement to the way in which such databases store or organize information analogous to the self-referential table in *Enfish* or the adaptable memory caches in *Visual Memory*. While the presentation of summary comparison usage information to users improves the quality of the information added to the database, an improvement to the information stored by a database is not equivalent to an improvement in the database's functionality. BSG Tech's claimed invention results in better user input, but the database serves in its "ordinary capacity" of storing the resulting information. *Enfish*, 822 F.3d at 1336.

Id. [3]

The same is true in this case. As noted, claim 1 of the '553 patent recites the functional and abstract steps of "providing" a database with secure storage areas, "reserving" a subarea of each secure area for each type of data received, "detecting a signal event" from the protected space, "coding the signal event," "transferring the coded message" to the database, "determining" the type of signal event reported, "storing" the coded message in a secure area and subarea of the database, and "providing access to information of the coded message packet through an Internet connection between the manager and the database based upon" the manager's password. The claims do not recite improvements in technology that help perform those steps or describe any means of accomplishing those steps other than through the use of a generic computer and commonplace communication networks, such as the Internet. [4]

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[3] Other Federal Circuit decisions have drawn the same distinction, between patent-eligible claims that "are directed to a specific improvement in the capabilities of computing devices," as opposed to "a process that qualifies as an 'abstract idea' for which computers are invoked merely as a tool." *Core Wireless Licensing S.A.R.L. v. LG Elecs., Inc.*, 880 F.3d 1356, 1361–62 (Fed. Cir. 2018) (citation omitted); *see also Thales Visionix Inc. v. United States*, 850 F.3d 1343, 1349 (Fed. Cir. 2017); *McRO, Inc. v. Bandai Namco Games Am., Inc.*, 837 F.3d 1299, 1316 (Fed. Cir. 2016); *DDR Holdings, LLC v. Hotels.com, L.P.*, 773 F.3d 1245, 1257–58 (Fed. Cir. 2014).

[4] Independent claims 19 and 35 have parallel limitations that do not differ materially, for this purpose, from the limitations of claim 1. The analysis applicable to claim 1 is therefore equally applicable to claims 19 and 35. *See Alice*, 573 U.S. at 226 (system claims are no different from method claims in substance: "The method claims recite the abstract idea implemented on a generic computer; the system claims recite a handful of generic computer components configured to

In *Intellectual Ventures I LLC v. Erie Indemnity Co.*, 850 F.3d 1315 (Fed. Cir. 2017), and *In re TLI Communications Patent Litig.*, 823 F.3d 607 (Fed. Cir. 2016), the Federal Circuit addressed patents on the use of an index to locate information in a computer database, and the classification and storage of digital images, respectively. In the *Erie Indemnity* case, the court held that "creating an index and using that index to search for and retrieve data" is an abstract idea, as in other cases involving "similar abstract concepts that merely collect, classify, or otherwise filter data." 850 F.3d at 1327. And in the *TLI Communications* case, the court concluded that the claims were "not directed to a solution to a 'technological problem,'" but were "simply directed to the abstract idea of classifying and storing digital images in an organized manner." 823 F.3d at 613 (citing *OIP Techs., Inc. v. Amazon.com, Inc.,* 788 F.3d 1359, 1364 (Fed. Cir. 2015).

Both of those cases are closely analogous to this one. Both entailed the organized storage of data in a computer database, and in both the court concluded that the idea of classifying and storing the data in a particular manner was an abstract idea. The same is true here. Although SMS argues that the "compartmentalized" structure described in the '553 patent—assigning a separate area to each protected space and a separate subarea to each type of signal—enhances the security of the information, the idea of classifying and organizing the data in that manner is just as abstract as the similar ideas of classifying and organizing data in *Erie Indemnity* and *TLI Communications*.

Yet another case with facts similar to this one is *CyberFone Systems, LLC v. CNN Interactive Group, Inc.*, 558 F. App'x 988 (Fed. Cir. 2014). In that case, the claim at issue recited

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implement the same idea."); *Voter Verified, Inc. v. Election Sys. & Software LLC*, 887 F.3d 1376, 1385 (Fed. Cir. 2018) (no distinction between system and method claims for section 101 purposes, "as they simply recite the same concept"); *Accenture Glob. Servs., GmbH, Inc. v. Guidewire Software, Inc.*, 728 F.3d 1336, 1344 (Fed. Cir. 2013) (system and method claims contain "only minor differences in terminology" and "require performance of the same basic process"). For present purposes, the difference between the method claims and the apparatus claims is inconsequential.

a method that comprised obtaining data entered on a telephone, separating it into component parts, and sending those parts to different destinations based on the information in the transmitted data. The court held the claim patent-ineligible. As the court explained, "[U]sing categories to organize, store, and transmit information is well-established. Here, the well-known concept of categorical data storage, *i.e.*, the idea of collecting information in classified form, then separating and transmitting that information according to its classification, is an abstract idea that is not patent-eligible." *Id.* at 992. The *CyberFone* court rejected the patent owner's argument that the claims were patent-eligible because of the requirement that the data be segregated and sent to different destinations. The court pointed out that the step of "mak[ing] the originally-gathered information accessible to different destinations without changing the content or its classification" did not add anything of substance to the "mere collection and organization of data." *Id.* at 993 (quoting *CyberSource Corp. v. Retail Decisions, Inc.*, 654 F.3d 1366, 1370 (Fed. Cir. 2011). Nor did the particular configuration of the steps of "obtaining, separating, and then sending information" confer patentability, as the combination of steps added nothing to "the underlying idea of categorical information storage." *Id.* As in *CyberFone*, the "compartmentalized" structure of the database in this case is simply a form of categorical data storage, and as such constitutes an abstract idea.

Those cases are not outliers. In numerous other cases, the Federal Circuit has observed that claims to computerized gathering, encoding, organizing, manipulating, transferring, and displaying data are directed to abstract ideas, as that term is used in section 101 cases. Some of those cases are listed below:

- *Data Engine Techs. LLC v. Google LLC*, 906 F.3d 999, 1012 (Fed. Cir. 2018) ("[T]hese claims are directed to the abstract idea of collecting spreadsheet data,

recognizing changes to spreadsheet data, and storing information about the changes.").

- *Interval Licensing LLC v. AOL, Inc.*, 896 F.3d 1335, 1346 (Fed. Cir. 2018) ("[T]he recited claims are directed to an abstract idea because they consist of generic and conventional information acquisition and organization steps that are connected to, but do not convert the abstract idea . . . into a particular conception of how to carry out that concept.").

- *Return Mail, Inc. v. U.S. Postal Serv.*, 868 F.3d 1350, 1368 (Fed. Cir. 2017) ("the steps of 'collecting data,' 'recognizing certain data within the collected data set,' and 'storing that recognized data in memory,' . . . we have found to be abstract under Step 1 [of *Alice*]").

- *FairWarning IP, LLC v. Iatric Sys., Inc.*, 839 F.3d 1089, 1097 (Fed. Cir. 2016) (merely selecting information for collection, analysis, and display "does nothing significant to differentiate a process from ordinary mental processes").

- *Intellectual Ventures I, LLC v. Capital One Fin. Corp.*, 850 F.3d 1332, 1341 (Fed. Cir. 2017) ("[T]he underlying concept embodied by the limitations merely encompasses the abstract idea of organizing, displaying, and manipulating data of particular documents.").

- *Intellectual Ventures I LLC v. Capital One Bank*, 792 F.3d 1363, 1371 (Fed. Cir. 2015) (asserted claims "consist[] of nothing more tha[n] the entry of data into a computer database, the breakdown and organization of that entered data according to some criteria, . . . and the transmission of information derived from that entered data to a computer user, all through the use of conventional computer components,

such as a database and processors, operating in a conventional manner") (quoting

district court's analysis with approval).

- *Content Extraction*, 776 F.3d at 1347 (stating that "collecting data," "recognizing certain data within the collected data set," and "storing the recognized data in memory" are abstract ideas).

In sum, the recited characteristics of the database do not render the claims non-abstract. SMS submits that ADT's argument ignores several important limitations of the asserted claims, in particular "the arrangement of the database and the specialized coding of the information generated by the sensors for use by the novel database," Dkt. No. 66, at 16, i.e., the coding and storage of data in areas and subareas of the database corresponding to the protected space and type of signal event. Those limitations, however, do not constitute improvements in computer or database technology akin to the technological improvements at issue in *Enfish* and *Visual Memory*. To the contrary, the segregated storage feature of the database in this case is no more specific or "technological" than the characteristics of the databases claimed in *Electric Power Group, BSG*, *Erie Indemnity*, and *CyberFone*. Accordingly, the Court concludes that independent claims 1, 19, and 35 of the '553 patent are directed to an abstract idea, as that term has been applied by the Supreme Court and the Federal Circuit in assessing patent-eligibility under section 101.

2. Inventive Concept

Turning to the second step of the *Alice* framework, SMS argues that even if its claims are directed to abstract ideas, they contain an "inventive concept" that renders them patent-eligible.

The "inventive concept" step requires the court to determine whether the claims recite an element or a combination of elements sufficient to ensure that the patent is directed to significantly more than the abstract idea itself. As the Supreme Court explained in *Alice*, the court at the second

step of the eligibility inquiry looks to see whether there are any "additional features" that constitute an inventive concept that would render the claims eligible for patenting even if they were determined to be directed to an abstract idea. *Alice*, 573 U.S. at 221; *see also Erie Indemnity*, 850 F.3d at 1328. SMS contends that the claims at issue in this case contain such additional features.

On this issue as well, the Federal Circuit's decision in *Electric Power Group* is instructive. After finding that the claims were directed to an abstract idea, the court stated that upon scrutinizing the claim elements "more microscopically," it found "nothing sufficient to remove the claims from the class of subject matter ineligible for patenting." 830 F.3d at 1354. The court pointed out that "merely selecting information, by content or source, for collection, analysis, and display does nothing significant to differentiate a process from ordinary mental processes, whose implicit exclusion from §101 undergirds the information-based category of abstract ideas." 830 F.3d at 1355. In language that is equally applicable here, the *Electric Power Group* court added that the claims before it.

> do not require an arguably inventive set of components or methods, such as measurement devices or techniques, that would generate new data. They do not invoke any assertedly inventive programming. Merely requiring the selection and manipulation of information . . . does not transform the otherwise-abstract processes of information collection and analysis. . . .
> Inquiry therefore must turn to any requirements for *how* the desired result is achieved. But in this case the claims' invocation of computers, networks, and displays does not transform the claimed subject matter into patent-eligible applications. The claims at issue do not require any nonconventional computer, network, or display components, or even a "non-conventional and non-generic arrangement of known, conventional pieces," but merely call for performance of the claimed information collection, analysis, and display functions "on a set of generic computer components" and display devices. . . .
> Nothing in the claims, understood in light of the specification, requires anything other than off-the-shelf conventional computer, network, and display technology for gathering, sending, and presenting the desired information.

Id. (quoting *BASCOM Glob. Internet Servs., Inc. v. AT&T Mobility LLC*, 827 F.3d 1341, 1349–52 (Fed. Cir. 2016)).

The same analysis applies here. The asserted claims recite no arguably inventive set of components, devices, techniques, or innovative programming. They merely provide for the selection and manipulation of information in a particular way. And, as in *Electric Power Group*, the claims do not require any non-conventional computer, network, or even a non-conventional and non-generic arrangement of known, conventional pieces. Rather, the claims merely call for performance of the claimed information collection, analysis, and display functions on a set of generic computer components and display devices performing conventional tasks for which they were designed. Thus, like the claims in *Electric Power Group*, the asserted claims in this case do not recite an inventive concept.

SMS argues that the "inventive concept" in this case "is found in the Asserted Claims' new and unique way of improving building monitoring systems and methods, particularly via their reliance on the claimed database." Dkt. No. 66, at 16. That is, SMS argues that the inventive concept resides in the invention itself, as a whole. But the Federal Circuit has explicitly rejected that approach. In *BSG*, the court explained that "[i]t has been clear since *Alice* that a claimed invention's use of the ineligible concept to which it is directed cannot supply the inventive concept that renders the invention 'significantly more' than that ineligible concept." *BSG Tech LLC*, 899 F.3d at 1290 (quoting *Alice*, 573 U.S. at 218); *see also Erie Indemnity*, 850 F.3d at 1328 ("In applying step two of the *Alice* analysis, we must 'determine whether the claims do significantly more than simply describe [the] abstract method' and thus transform the abstract idea into patentable subject matter.") (quoting *Ultramercial*, 772 F.3d at 715).

SMS separately argues that the claimed database memory structure "is not the same as a generic database or the generic relational databases discussed in ADT's two SQL sources." Dkt. No. 66, at 9. For support, SMS points to the prosecution history of the '553 patent, where the

patent examiner allowed the application to issue after the applicants amended the claims to add

"the particular database structure present in the Asserted Claims." *Id.*

That argument amounts to saying that the invention, even if directed to an abstract idea, is

nonetheless novel and therefore should be patent-eligible. But novelty and patent eligibility are

different things. Even if it is true, as SMS asserts, that the systems that were previously used to

perform building alarm monitoring employed entirely different methods and apparatuses from

those claimed in the '553 patent, *see* '553 patent, col. 1, ll. 11-34, that is not enough to satisfy the

"inventive concept" requirement.

The Supreme Court has made this point clear, holding that an abstract idea may be new,

but nonetheless be unpatentable under section 101. *See Mayo Collaborative Servs.*, 566 U.S. at

90 ("We recognize that, in evaluating the significance of additional steps, the § 101 patent-

eligibility inquiry and, say, the novelty inquiry might sometimes overlap. But that need not always

be so."); *Diamond v. Diehr*, 450 U.S. 175, 188–89 (1981) ("The 'novelty' of any element or steps

in a process, or even of the process itself, is of no relevance in determining whether the subject

matter of a claim falls within the § 101 categories of possible patentable subject matter."); *see also*

Data Engine Technologies, 906 F.3d at 1011 ("The eligibility question is not whether anyone has

ever used tabs to organize information. That question is one of novelty reserved for §§ 102 and

103. The question of abstraction is whether the claim is 'directed to' the abstract idea itself.");

SAP America, 898 F.3d at 1163 ("We may assume that the techniques claimed are

'[g]roundbreaking, innovative, or even brilliant,' but that is not enough for eligibility."); *Synopsys,*

Inc. v. Mentor Graphics Corp., 839 F.3d 1138, 1151 (Fed. Cir. 2016) ("[A] claim for a *new* abstract

idea is still an abstract idea."); *Intellectual Ventures I LLC v. Symantec Corp.*, 838 F.3d 1307, 1315

(Fed. Cir. 2016) ("While the claims may not have been anticipated or obvious . . . , that does not

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suggest that the idea of 'determining' and 'outputting' is not abstract, much less that its implementation is not routine and conventional."); *Genetic Techs. Ltd. v. Merial LLC*, 818 F.3d 1369, 1376 (Fed. Cir. 2016) ("That is, under the *Mayo/Alice* framework, a claim directed to a newly discovered law of nature (or natural phenomenon or abstract idea) cannot rely on the novelty of that discovery for the inventive concept necessary for patent eligibility; instead, the application must provide something inventive, beyond mere 'well-understood, routine, conventional activity.'") (quoting *Mayo Collaborative Servs.*, 556 U.S. at 73). As the Federal Circuit put it in the *SAP America* case, it is not enough "for subject-matter eligibility that claimed techniques be novel and nonobvious in light of prior art, passing muster under 35 U.S.C. §§ 102 and 103." *SAP America*, 898 F.3d at 1163.

Viewing the claims on a limitation-by-limitation basis, the Court concludes that none of the limitations evinces an "inventive concept" sufficient to satisfy the second step of the Supreme Court's test. Moreover, viewing all the limitations of each of the independent claims in combination, the Court concludes that none of those claims satisfies that standard.

First, the claims recite a database having "a plurality of secure storage areas," each of which is reserved for one of the "protected spaces," and in which a "subarea of each secure storage area" is reserved for each type of signal received from the protected spaces. But reserving different portions of a database for the receipt and storage of different categories of entries—also known as the allocation of memory—is entirely conventional. That is what computers do. *See Alice*, 573 U.S. at 226 ("Nearly every computer will include a 'communications controller' and a 'data storage unit' capable of performing the basic calculation, storage, and transmission functions required by the method claims."); *Intellectual Ventures I LLC v. Capital One Fin. Corp.*, 850 F.3d at 1342 (recitation of "routine steps of data collection and organization using generic computer

components and conventional computer data processing activities" is not enough to satisfy the "inventive concept" requirement).

Moreover, organizing and accessing records through the creation of an index-searchable database "includes longstanding conduct that existed well before the advent of computers and the Internet," and claims directed to such conduct have been held patent ineligible. *Erie Indemnity*, 850 F.3d at 1327; *see also Content Extraction*, 776 F.3d at 1347 (the idea of "1) collecting data, 2) recognizing certain data within the collected data set, and 3) storing that recognized data in a memory" is not an inventive concept); *Mortg. Grader, Inc. v. First Choice Loan Servs. Inc.*, 811 F.3d 1314, 1324–25 (Fed. Cir. 2016) ("[G]eneric computer components such as an 'interface,' 'network,' and 'database' . . . do not satisfy the inventive concept requirement."); *Versata Dev. Grp., Inc. v. SAP Am., Inc.*, 793 F.3d 1306, 1334 (Fed. Cir. 2015) (arranging information into "hierarchies" is "conventional and well-known"); *Intellectual Ventures I LLC v. Capital One Bank (USA)*, 792 F.3d at 1368 (a "database" and "a communication medium" are generic computer elements); *Accenture Glob. Servs., GmbH v. Guidewire Software, Inc.*, 728 F.3d 1336, 1344–45 (Fed. Cir. 2013) (database components do not make claims patent-eligible).

The application of such conventional elements to a specific field, such as monitoring alarm systems for buildings, does not convert those conventional elements into an "inventive concept." It is well established that patent-ineligible subject matter does not become patent-eligible merely by being applied in a particular technological environment. *Alice*, 573 U.S. at 222 (The "prohibition against patenting abstract ideas cannot be circumvented by attempting to limit the use of [the idea] to a particular technological environment.") (internal quotations omitted); *Bilski v. Kappos*, 561 U.S. 593, 612 (2010) ("limiting an abstract idea to one field of use or adding token postsolution components [does] not make the concept patentable"); *buySAFE, Inc. v. Google, Inc.*,

765 F.3d 1350, 1355 (Fed. Cir. 2014) ("narrowing of such long-familiar commercial transactions does not make the idea non-abstract for section 101 purposes"); *Intellectual Ventures I LLC v. Symantec Corp.*, 838 F.3d at 1319 ("performing otherwise abstract activity on the Internet does not save the idea from being patent-ineligible"). Thus, nothing inventive is added by the functional limitation requiring "reserving a subarea of each secure storage area of the database for each type of data received from the protected spaces," or by the functional limitation requiring "detecting a signal event" from each of the protected spaces.

Second, each of the independent claims recites "detecting a signal event of a protected space" or its close equivalent. The collection of sensor data, "including when limited to particular content (which does not change its character as information) [is] within the realm of abstract ideas." *Elec. Power Grp.*, 830 F.3d at 1353. The specification describes standard sensors of the type that would be used to collect information in the patented method, such as "thermostats, humidistats . . . network power meters and network environmental sensors," '553 patent, col. 1, ll. 20-22; col. 2, ll. 12-15, and SMS does not suggest that there is anything inventive in the claimed use of sensors to collect information.

The conventional use of generic sensors in the '553 patent contrasts with the use of sensors in *Thales Visionix Inc. v. United States*, 850 F.3d 1343 (Fed. Cir. 2017). In that case, the Federal Circuit held that claims reciting a unique configuration of inertial sensors, and the use of a novel method for calculating the location and orientation of an object relative to a moving platform rendered the invention patent-eligible, because the sensors were used in an unconventional way. *Id.* at 1348–49.

Third, coding a signal event into a packet message for transmission over a network is a high-level generic description of an entirely conventional action that is part of any digital

transmission. *See Two-Way Media Ltd. v. Comcast Cable Commc'ns, LLC*, 874 F.3d 1329 (Fed. Cir. 2017) (claim 1 [a method for transmitting message packets over a communications network] is not an inventive concept); *RecogniCorp, LLC v. Nintendo Co.*, 855 F.3d 1322, 1328 (Fed. Cir. 2017) ("[C]laim 1 is directed to the abstract idea of encoding and decoding. The addition of a mathematical equation that simply changes the data into other forms of data cannot save it."); *buySAFE,* 765 F.3d at 1355 ("That a computer receives and sends the information over a network—with no further specification—is not even arguably inventive."); *Digitech Image Techs. v. Elecs. For Imaging, Inc.*, 758 F.3d 1344, 1351 (Fed. Cir. 2014) ("organizing . . . information into a new form" does not make the claims patent eligible); *Smartflash LLC v. Apple Inc.*, 680 F. Appx. 977, 983 (Fed. Cir. 2017) ("writing data to implement an abstract idea on a computer does not transform the nature of the claim into a patent-eligible application").

Nor does the use of the Internet to transmit the collected signals add any inventive concept, as the patent teaches no new way of using the Internet, but merely recites the conventional use of the Internet to transmit data. The Federal Circuit has made clear that conducting a commonplace activity over the Internet does not avoid the problem of abstractness. *See Ultramercial*, 772 F.3d at 716 ("[T]he use of the Internet is not sufficient to save otherwise abstract claims from ineligibility under § 101."); *see also BASCOM Glob. Internet Servs.*, 827 F.3d at 1348 ("An abstract idea on an Internet computer network or on a generic computer is still an abstract idea.") (citation and quotation omitted); *CyberSource*, 654 F.3d at 1370 (a method of verifying the validity of credit card transactions over the Internet held patent-ineligible as directed to an abstract idea); *buySAFE, Inc. v. Google, Inc.*, 765 F.3d 1350, 1351 (Fed. Cir. 2014) (holding that a claim directed to guaranteeing a party's performance in an Internet transaction was directed to an abstract idea).

Finally, the function of storing the signal data in secure areas and subareas corresponding to the protected space and type of signal event, and providing access to the stored information based on a password assigned to the manager, is not an inventive concept. As noted above, ADT's uncontradicted evidence showed that relational databases such as the SQL-based database, which were well-known and conventional at the time of the '553 application, segregated data according to data types and entries within each data type. That database structure would be readily adaptable to segregate data according to source and signal type.

Pointing to prior art references concerning conventional SQL relational databases, ADT argues that "the claimed plurality of secure storage areas is simply the conventional tables of a relational database," and "the claimed subareas are nothing more than the columns of each table where users can store different types of data." Dkt. No. 62, at 12–13. SMS does not specifically address those assertions. Instead, by way of an answer SMS relies on the fact that the examiner allowed the '553 patent to issue over a close prior art reference. Dkt. No. 66, at 9–10. As noted above, however, the fact that the examiner may have concluded that the invention overcame a particular reference for purposes of obviousness or anticipation does not save the patent from challenge for ineligibility under section 101.

When, as here, the moving party bears the ultimate burden of proof on an issue, the moving party must come forward with evidence on summary judgment that would entitle it to a directed verdict if the evidence went uncontradicted at trial. In that setting, summary judgment is appropriate if the nonmovant's response fails to raise a genuine issue of material fact as to that issue. *See Saab Cars USA, Inc. v. United States*, 434 F.3d 1359, 1368 (Fed. Cir. 2006); *Bailey v. McDonnell Douglas Corp.* 989 F.2d 794, 802 (5th Cir. 1993). In this case, SMS has failed to rebut ADT's evidence regarding the conventional manner in which the SQL-based relational database

could readily be used to create segregated areas and subareas for different protected spaces and types of data signals. SMS has thus failed to establish the existence of a disputed question of fact on that issue.

Restricting access to data in a database, such as by password protection, is also a conventional practice that does not rise to the level of an inventive concept. *See Ultramercial*, 772 F.3d at 716 ("Adding routine additional steps such as . . . restrictions on public access . . . does not transform an otherwise abstract idea into patent eligible subject matter."); *Prism Techs. LLC v. T-Mobile USA, Inc.*, 696 F. Appx. 1014, 1017 (Fed. Cir. 2017) ("T-Mobile argues that the asserted claims recite ineligible subject matter because they: (1) are directed to the abstract idea of controlling access to resources; and (2) are non-inventive because they recite generic computer hardware running generic computer software that performs the abstract functions routine to the process of restricting access. We agree.").[5]

SMS argues that even if all the elements of the Asserted Claims are individually conventional, "ADT has provided zero evidence that the claimed combination of steps or components is conventional." Dkt. No. 66, at 17. Citing the specification, SMS argues that the invention entails using "a coding step or code processor component that codes a detected signal event into a packet with the required information that can be used by the database to store the information in the appropriate area and subarea of the database. . . . Additionally, the secure

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[5] Citing *Ancora Technologies, Inc. v. HTC America, Inc.*, 908 F.3d 1343 (Fed. Cir. 2018), SMS argues that improving computer security can be "a non-abstract computer-functionality improvement." However, SMS acknowledges that *Ancora* requires that the improvement in security be effected "by a specific technique that departs from earlier approaches to solve a specific computer problem." Dkt. No. 66, at 13 (quoting *Ancora*, 908 F.3d at 1348). Password protection clearly does not qualify under that standard.

database structure is paired with the password-specific access to areas and subareas of the database to allow internet access to the information in the database." *Id.* at 17–18.

But SMS points to nothing that would suggest that the combination of claim elements is any more inventive than the limitations themselves, analyzed separately. The combination, stripped of the excess verbiage in the claims, comes down to this: a method and apparatus for monitoring spaces that transmits alarm signals to a database where they are stored according to each protected space and each signal type, in a manner that enables a user with a password to retrieve signals pertaining to different signals and different spaces. Nothing in the specification or the claims suggests any specific inventive manner in which any of those functions, or the combination of those functions, can be performed.

Accordingly, the Court concludes that independent claims 1, 19, and 35 of the '553 patent contain no "inventive concept" that would render those claims patent-eligible regardless of the disposition of the "abstract idea" step of the *Alice* test for patent ineligibility.

3. The Dependent Claims

SMS has asserted 17 dependent claims. The dependent claims fall into ten groups, as follows:

- Claims 2, 20, and 36 add to claims 1, 19, and 35, respectively, the limitation of associating a time stamp with the coded signal event.

- Claims 3 and 21 add to claims 1 and 19, respectively, the limitation of associating a source indicator with the signal event.

- Claims 4 and 22 add to claims 1 and 19, respectively, the limitation of having the manager of the protected space receive the password from the controller of the database.

- Claims 5 and 23 add to claims 1 and 19, respectively, the limitation of presenting the manager of the protected space with a menu of display options for the information in the secure storage area.

- Claims 7 and 25 add to claims 1 and 19, respectively, the limitation of defining the message as environmental data related to the protected space.

- Claims 8 and 26 add to claims 1 and 19, respectively, the limitation that the step of detecting a signal event includes detecting the passage of a predetermined time period.

- Claims 9 and 27 add to claims 1 and 19, respectively, the limitation of measuring a parameter within the protected space.

- Claim 17 adds to claim 1 the limitation of graphing the signal event for the manager.

- Claim 18 adds to claim 1 the limitation of comparing the magnitude of the signal event with a threshold value and sending an email message to the manager when the magnitude exceeds the threshold value.

As is evident from the summary above, the dependent claims add nothing to the independent claims of the '553 patent that is material to the section 101 issue. Adding a degree of particularity through those additional limitations does not render those claims patent-eligible, as the additional limitations merely add further insignificant details and do not convert otherwise patent-ineligible subject matter into a patent-eligible invention.

The courts have made clear that adding a degree of particularity through additional limitations does not render dependent claims patent-eligible if the additional limitations merely add further insignificant details and do not convert otherwise patent-ineligible subject matter into a patent-eligible invention. *See Affinity Labs of Tex., LLC v. DirecTV, LLC*, 838 F.3d 1253, 1264

(Fed. Cir. 2016) (dependent claims all recited functions that were not inventive but simply constituted "particular choices from within the range of existing content or hardware"); *Internet Patents*, 790 F.3d at 1349 (additional limitations of the dependent claims held not to add an inventive concept, for "they represent merely generic data collection steps or siting the ineligible concept in a particular technological environment"); *Content Extraction*, 776 F.3d at 1349 (dependent claims did not add any inventive concepts, but merely recited routine and conventional functions of scanners and computers); *see generally Bilski*, 561 U.S. at 612 ("[A]dding token postsolution components [does] not make the concept patentable."); *Parker v. Flook*, 437 U.S. 584, 590 ("The notion that post-solution activity, no matter how conventional or obvious in itself, can transform an unpatentable principle into a patentable process exalts form over substance."); *Fort Properties, Inc. v. Am. Master Lease LLC*, 671 F.3d 1317, 1323–24 (Fed. Cir. 2012) ("AML simply added a computer limitation to claims covering an abstract concept—that is, the computer limitation is simply insignificant post-solution activity.").

While in some cases dependent claims could be patent-eligible despite their corresponding independent claims being patent-ineligible, *see, e.g., Berkheimer v. HP Inc.*, *supra*, that is not the case here. In the case of the '553 patent, the addition of minor and conventional features such as a time stamp, a source indicator, a menu of display options, or a graph of the measured values does not render the independent claims any less abstract than the independent claims, as none of those features qualifies as an "inventive concept" that would save an otherwise abstract idea from ineligibility. *See Internet Patents*, 790 F.3d at 1349 ("The additional limitations of these dependent claims do not add an inventive concept."); *Content Extraction*, 776 F.3d at 1349 (dependent claims may have a narrower scope than the independent claims but are not drawn to an "inventive concept that transforms the corresponding claim into a patent-eligible application of the otherwise

ineligible abstract idea") (internal quotations and citations omitted); *see also Planet Bingo, LLC v. VKGS LLC*, 576 F. Appx. 1005, 1007 (Fed. Cir. 2014) (invalidating dependent claims that "recite only slight variations" from the independent claims); *Kroy IP Holdings, LLC v. Safeway, Inc.*, 107 F. Supp. 3d 677, 698–99 (E.D. Tex. 2015) (invalidating dependent claims that "involve trivial variations" from the independent claims), *aff'd*, 639 F. App'x 637 (Fed. Cir. 2016); *Pres. Wellness Techs. LLC v. Allscripts Healthcare Sols.*, No. 2:15-cv-1559, 2016 WL 2742379, at *11 (E.D. Tex. May 10, 2016) (dependent claims "simply constitute specific applications of the invention, such as providing specific types of medical information on the patient access screens"), *aff'd,* 684 F. Appx. 970 (Fed. Cir. 2017).

The '553 specification itself discloses that a time stamp is provided by the clock in a generic CPU. '553 patent, col. 2, ll. 10-12; col. 4, ll., 29-31. The specification further explains that the "source indicator" merely "identifies the CPU," a conventional function of a generic processor. *Id.*, col. 4, ll. 20-21. The menu of display options is described in the specification as a display of the "selection of information collected regarding the [protected] space," that is made available "to facilitate the presentation of information." *Id.*, col. 2, line 62, to col. 3, line 3. Nothing in the specification or the claims suggests that the display of available information, which is depicted in Fig. 4 of the patent, constitutes an "inventive concept."

The same is true of the dependent claims that recite the limitation of graphing the signal event for the manager. The specification describes the graphing option as a function performed by the CPU upon election of that option by the manager. *Id.,* col. 4, ll. 59-64 & Fig. 7. Graphing is a well-understood and conventional function, both for humans and computers, and nothing in the specification suggests that there is anything inventive about the way that the graphing function is performed in the methods or apparatuses recited in the dependent claims.

Similarly, having the controller of the database provide the password to the manager of the protected space adds nothing material to the analysis of patent eligibility. The limitation regarding defining the message as environmental data simply constitutes a choice of nomenclature or, at most, the selection of a subset of all possible conditions to measure. The limitation regarding the detection of the passage of time entails merely the addition of a conventional computer clock to the system, and the limitation regarding sending an email when the signal exceeds a threshold value is likewise just a conventional variation on the detecting of a "signal event" in claims 1 and 19.

Finally, the limitation that recites measuring a parameter within the protected space is simply a way of characterizing the "signal event" referenced in claims 1 and 19, reflecting that the signal events can measure a wide variety of conditions within the protected space, including environmental factors (such as temperature and humidity), or electrical power conditions. *See id.*, col. 3, ll. 12–16, 46–51; col. 4, ll. 47-55 & Fig. 6. And the limitation that recites comparing the magnitude of the signal event with a threshold value and sending an email message to the manager when the magnitude exceeds the threshold value reflects the routine practice of monitoring a measured condition to determine if it has exceeded a previously set threshold value. Thus, the Court concludes that there is nothing in the dependent claims that would render them patent-eligible independent of the limitations in the corresponding independent claims.
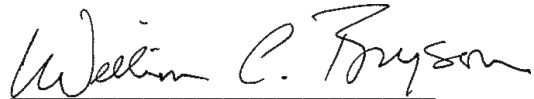
* * * * *

Based on the analysis set forth above, the Court GRANTS the defendant's motion for summary judgment of patent ineligibility as to claims 1-5, 7-9, 17-23, 25-27, and 35-36 of the '553 patent, the only claims asserted in this case. Accordingly, the Court will direct the entry of final judgment in favor of defendant ADT. In light of this order, the Court will DENY AS MOOT the

Defendant ADT LLC's Motion to Dismiss Plaintiff's First Amended Complaint under Rule 12(b)(6), Dkt. No. 18.

IT IS SO ORDERED.

SIGNED this 7th day of February, 2019.

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WILLIAM C. BRYSON
UNITED STATES CIRCUIT JUDGE